

ATLAS+CMS Preliminary

LHC*top*WG

$\sigma_{t\bar{t}}$ summary, $\sqrt{s} = 13$ TeV

Sept 2019

..... NNLO+NNLL PRL 110 (2013) 252004
 $m_{\text{top}} = 172.5$ GeV, $\alpha_s(M_Z) = 0.118 \pm 0.001$

■ scale uncertainty
 ■ scale \oplus PDF \oplus α_s uncertainty

total stat
 $\sigma_{t\bar{t}} \pm (\text{stat}) \pm (\text{syst}) \pm (\text{lumi})$

ATLAS, dilepton $e\mu$ *

ATLAS-CONF-2019-041, $L_{\text{int}} = 36.1$ fb⁻¹

$826 \pm 4 \pm 12 \pm 16$ pb

ATLAS, $l+jets$ *

ATLAS-CONF-2019-044, $L_{\text{int}} = 139$ fb⁻¹

$830 \pm 0.4 \pm 32 \pm 15$ pb

CMS, dilepton $e\mu$

PRL 116 (2016) 052002, $L_{\text{int}} = 43$ pb⁻¹, 50 ns

$746 \pm 58 \pm 53 \pm 36$ pb

CMS, dilepton $e\mu$

EPJC 79 (2019) 368, $L_{\text{int}} = 35.9$ fb⁻¹, 25 ns

$803 \pm 2 \pm 25 \pm 20$ pb

CMS, dilepton $\tau+e/\mu$ *

CMS-PAS TOP-18-005, $L_{\text{int}} = 35.9$ fb⁻¹, 25 ns

$781 \pm 7 \pm 62 \pm 20$ pb

CMS, $l+jets$

JHEP 09 (2017) 051, $L_{\text{int}} = 2.2$ fb⁻¹, 25 ns

$888 \pm 2 \pm 26 \pm 20$ pb

CMS, all-jets *

CMS-PAS TOP-16-013, $L_{\text{int}} = 2.53$ fb⁻¹, 25 ns

$834 \pm 25 \pm 118 \pm 23$ pb

NNPDF3.0 JHEP 04 (2015) 040

MMHT14 EPJC 75 (2015) 5

CT14 PRD 93 (2016) 033006

ABM12 PRD 89 (2015) 054028
 $[\alpha_s(m_Z) = 0.113]$

* Preliminary

